

Technology

Licensing

CATEGORY

Sampling Device



BENEFITS

- Portable
- Lightweight
- Battery-powered
- Undamaged sample collection
- One-handed use
- Can collect multiple samples

Handheld Underwater Suction Sampler

A U.S. Geological Survey (USGS) scientist and diver has invented an improved suction sampler for collecting underwater biological specimens, such as small aquatic plants and animals -- U.S. Patent 9,921,139. This sampler has many advantages over others in the field which are too heavy or cumbersome to effectively collect specimens. The sampler is lightweight, which does not compromise the buoyancy and safety of the diver. It has a portable self-contained power source and enables one-handed operation. Having one hand free improves safe operation of dive equipment. As a result, the sampler is easier and safer to use in an underwater environment, especially in conditions of low visibility where safe operation is essential. Due to the sampler's compact size and ergonomic design, scientists can use it for sampling in high velocity streams or adverse water conditions.

For licensing opportunities at USGS, contact James M. Mitchell at gs_usgs_patents@usgs.gov